

DIGITAL CAMERAS

INTRODUCTION

While £100 is enough to buy a dependable camera, you only need to spend a little more to get something that's really worth getting excited about.

In this Labs round-up, we review a selection of cameras that have gorgeous ultra-compact designs, lightning-fast performance, enormous screens, huge zooms, optical image stabilisation, face detection and fantastic image quality.

Picking your ideal snapping companion can be tricky, but we will tell you exactly which cameras are worth buying, and why.

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SUPER SNAPPERS

Premium compact digital cameras can give you a lot more snap for your cash. These 12 models offer a formidable array of features from just £129 including VAT



Choosing a... Premium Compact Camera

For years, digital cameras have been evolving to offer bigger images, faster speeds and smaller, smarter designs. But now that even a budget camera can take beautiful photos at breakneck speeds, and look rather dashing in the process, where does that leave the premium compact camera?

Fortunately, manufacturers are coming up with novel ways to improve the quality of their upmarket cameras and the photos they take. The 12 models here are gadget-laden marvels. We're delighted that these innovations are designed to improve image quality rather than bog you down with frivolous features.

QUALITY CONTROL

There are some things you should be able to take for granted when spending up to £200 on a digital camera. Fantastic image quality is one. Image quality depends on many variables, from the lens and sensor to the focus mechanism and how well the camera adjusts to different lighting conditions. Most cameras take a great picture on a sunny day, but when you're spending a little more on a camera, you should expect it to take a great picture on cloudy days, at dusk, indoors with and without the flash, and under complex lighting, such as a portrait taken in the shade with a sunlit background.

Performance is another area where you shouldn't compromise. One major benefit of digital photography is the ability to snap away without worrying about film or developing costs, and it's often worth taking a handful of shots of a particular scene so you can choose the best one afterwards. However, a slow camera will make this difficult, and a slow startup time or a fussy autofocus may mean you miss the moment altogether.

We consider a healthy battery life another essential quality in a premium digital camera, but it seems not everyone agrees with us. All the cameras in this round-up come with li-ion rechargeable batteries. This helps keep running costs down and the cameras compact. However, the combination of large LCD screens and slim batteries doesn't bode well for battery life. The average result in our controlled test over the last couple of years is 397 shots, but six cameras reviewed here took less than 300. This is disappointing, but we'd be willing to live with cameras that manage over 250.

PREMIUM RATES

If the basics are in place, it's time to consider what else you can get for your money. Our favourite extra feature is an augmented zoom range over the bog-standard 3x zooms common to most compact digital cameras. Six of



the cameras offer a little – and in some cases a lot – more. A large zoom makes the difference between a shot that documents a place or event, and one that finds an interesting composition and draws the eye to a specific point of interest.

Large zooms are more susceptible to blur from camera shake, so optical image stabilisation is particularly important. It's useful in cameras with smaller zooms, too, allowing photos to be shot in lower light without resorting to the flash.

If you like to get creative with your photography, manual exposure and manual focus are a must. These can be useful for getting the lighting and focus just right when the automatic settings are behaving erratically, and they can also be useful for special effects such as deliberately under- or overexposed shots, motion blur and depth-of-field effects. The latter are dependent on the aperture used, with larger apertures focusing only on subjects a specific distance away and smaller apertures keeping the whole scene sharply focused. Aperture- and shutter-priority modes let you experiment with depth-of-field and motion-blur effects, while leaving the camera to set the overall exposure.

One of the newest extra features to emerge is face detection. Faces are often the most important part of a photo. If the camera can identify where they are, it can use this information to find the ideal focus, exposure and flash settings. All but one of the cameras on test

How we test Digital cameras

After spending time getting to know each camera's controls, we used each one to shoot a series of 48 controlled tests. Each test is designed to reveal a specific flaw in the cameras' image quality. Outdoor shots assess colours and detail in favourable conditions. Shots through an open door leading outside test their ability to handle high-contrast scenes. Indoor shots without the flash reveal how intelligently they balance shutter speed, ISO speed and aperture settings to produce balanced exposures, while shots in low light at different ISO speeds test their noise levels.

As most cameras here support face recognition, we also examined how quickly and accurately they could spot faces, and how well they used this to cope with tricky

include this feature, but their effectiveness varies widely. Some take a few seconds to spot a face, and then only if it's evenly lit and looking directly at the camera, while others can spot multiple faces almost instantly. However, even for the cameras that can track faces reliably, their success in using this information varies. All can ensure that the autofocus locks on to the face, but some struggle more with the exposure, getting distracted by bright or dark backgrounds.

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lighting conditions. For the cameras that include optical image stabilisation, we took 20 handheld shots using a shutter speed of $\frac{1}{30}$ of a second, and a 105mm focal length (the maximum telephoto setting of most 3x zoom cameras), then counted how many of the resulting pictures were blur-free.

Performance tests were conducted by counting the number of photos each camera took in 30 seconds at maximum quality settings when shooting a bright subject, a dark subject with and without the flash, using manual focus and in continuous mode. We converted most results into seconds per photo, but continuous mode is converted into frames per second (fps) for comparison with quoted specifications of other cameras.

TOP OF THE CLASS

With so many extra features on offer on top of the intricacies of image quality, it can be hard to pick your ideal camera. Sadly, no single camera offers all of the above in abundance. However, no fewer than eight cameras seriously impressed us, and we'd be happy to recommend any of the 4- and 5-star rated cameras. Two models really stood out for us, though, so turn the page to find out which is right for you.



FUJIFILM FinePix F40fd

★★★★★

£129 inc VAT



We first reviewed the F40fd in *What's New, Shopper* July 2007, where it picked up a Best Buy award for its fantastic image quality and well-conceived controls. We decided to see how it fares against the current crop of premium compact cameras.

The 3x zoom lens and lack of image stabilisation don't compare well to other cameras in this group, but the low price makes up for it. The F40fd's performance is less forgivable. It captured a shot every three seconds, less than half the speed of the best cameras. Continuous shooting was at 0.4fps, though we appreciate how the camera refocused between each shot.

Photographic controls are fairly basic, but there are some interesting scene presets, five of which are available directly from the mode dial. Our favourite is Natural & Flash, which takes a picture at a high ISO speed, closely followed by another using the flash, leaving you to choose the best one. It's possible to limit the highest available ISO speed in Auto ISO mode, particularly useful because the fully automatic mode is too eager to jump to ISO 1600, which results in photos spoiled by noise.

Image quality is excellent, with exquisite colours and crisp detail, but the F40fd didn't excel compared to the other cameras in this group. Low noise has long been the trump card of Fujifilm cameras, but the competition has caught up, and the Optio A30's shots at ISO 1600 were smoother and more detailed. With sharper detail and superior performance, Pentax's A30 is the better camera.

SUMMARY

- ✓ Low image noise; low price
- ✗ Pedestrian performance

COMPACT DIGITAL CAMERA
8.1 megapixels (3,296x2,472 pixels), 3x optical zoom, 25MB internal memory, SD and xD, 3.6V 1,150mAh li-ion battery
PART CODE N079010A
SUPPLIER www.purelygadgets.co.uk
DETAILS www.fujifilm.co.uk

PENTAX Optio A30

★★★★★

£133 inc VAT



The Optio A30 is a modest-looking camera, and it wasn't until we totted up its pros and cons that we realised how impressive it is.

The 10-megapixel sensor, 2½in, 230,000-pixel screen and optical image stabilisation are fairly typical here, but they're more impressive considering the price. The straightforward controls are standard fare for an Optio camera, except for an additional button labelled Preview. This triggers the image stabilisation to see its effects on the LCD screen, which is an interesting but pointless function. Stabilisation is routinely used while capturing pictures, but it only reduced and rarely eliminated blur at 1/50s shutter speeds. The onscreen menus are well organised and provide access to a wide range of functions, including shutter priority and manual exposure modes, but strangely not aperture priority. We like how it's possible to set the maximum ISO speed to be used in Auto ISO mode.

The camera is quick to focus, even in low light and at telephoto zoom settings. With a fast SD card, it captured a 10-megapixel photo every 1.3 seconds. The continuous mode wasn't much faster, though, coming in at 1.1fps, and the slim battery lasted for only 283 shots in our test.

Our image quality tests revealed consistently excellent results. Colours were warm and vibrant, and portraits shot in direct sunlight were among the best for capturing natural skin tones while avoiding clipped highlights. Detail was superb, especially in low light, and for £133 it all adds up to a real bargain.

SUMMARY

- ✓ Excellent image quality; fast
- ✗ Poor battery life

COMPACT DIGITAL CAMERA 10 megapixels (3,648x2,736 pixels), 3x optical zoom, 22MB internal memory, SDHC, 3.7V 710mAh li-ion battery
PART CODE 19215
SUPPLIER www.ebuyer.com
DETAILS www.pentax.co.uk

PENTAX Optio W30

★★★★★

£144 inc VAT



It's not the prettiest camera, but the Optio W30 is slim, compact and waterproof to depths of three metres. This makes it an excellent choice for snorkelling enthusiasts, but it's also reassuring for general beach use and skiing trips, as well as the UK climate.

Waterproofing aside, it's one of the more basic cameras here. The 7.1-megapixel resolution is the joint lowest, as is the 115,000-pixel screen resolution and the 3x zoom lens. The claimed Shake Reduction facility is electronic only, and involves switching to a high ISO speed to reduce the shutter speed, which sacrifices image quality. Face detection is included, but it proved ineffective in our tests. However, there are some more useful options, including a customisable auto ISO function.

The W30's performance is its biggest flaw. It took three seconds to switch on and capture a photo and over four seconds between subsequent shots, mostly because of its slow auto-focus. Image quality was much better, but detail and image noise weren't up to the standards set by the others on test. ISO 3200 is available, but pictures almost vanished under a blizzard of noise at this setting. ISO 400 is the highest setting we would be happy to use on a regular basis, which is often too low for indoor handheld photography without the flash.

The W30 has more in common with budget cameras than the other models here, but its waterproof design justifies its price. It's certainly more affordable and neater than a camera and separate waterproof housing.

SUMMARY

- ✓ Waterproof design
- ✗ Slow; poor battery life

COMPACT DIGITAL CAMERA 7.1 megapixels (3,072x2,304 pixels), 3x optical zoom, 22MB internal memory, SDHC, 3.7V 740mAh li-ion battery
PART CODE 19275
SUPPLIER www.purelygadgets.co.uk
DETAILS www.pentax.co.uk

OLYMPUS µ820

★★★★★

£151 inc VAT



The µ820 has much in common with the µ780, which picked up a Best Buy award in *What's New, Shopper* October 2007. They share the same ultra-compact, splash-proof design and 5x zoom lens, but the 820 ups the resolution and screen size. It also omits the 780's optical image stabilisation and illuminated button icons, but costs around £25 less.

The use of slow xD cards hampers performance, with a three-second gap between shots and a continuous mode that's limited to short bursts of photos. Video mode records only 10 seconds at the top quality setting. The big screen and slim battery are a bad combination for battery life, and 229 shots is the lowest result in this group.

High-contrast scenes are a challenge for digital cameras, but the µ820 has an effective solution to avoid clipped highlights and lowlights. A dedicated button activates Shadow Adjustment Technology, which brightens up darker areas using digital processing. This improved photos with a bright or dark background or that combined exterior and interior views. Elsewhere, colours were equally impressive, with superb skin tones in a range of lighting conditions. Sharpness and detail weren't up to the standards of the best cameras here, but skin textures were more detailed than with Sony's cameras. Noise was never completely absent and ISO 800 shots looked smudged, but ISO 400 shots compared well with the competition.

The µ780's stabilisation and better performance are worth paying extra for, but the 820 isn't far behind.

SUMMARY

- ✓ Superb photos in tricky lighting
- ✗ Poor battery life

COMPACT DIGITAL CAMERA 8 megapixels (3,264x2,488 pixels), 5x optical zoom, 47MB internal memory, xD slot, 3.7V 740mAh li-ion battery
PART CODE N3093792
SUPPLIER www.amazon.co.uk
DETAILS www.olympus.co.uk

SONY Cyber-shot DSC-T20

★★★★

£155 inc VAT

The DSC-T20 shares its design with the T100, but its specifications are more modest, with a 3x zoom and 2½in screen, and it also costs around £50 less.

The menus and options are largely identical to those on the W90 (reviewed below), but the T20 lacks the mode dial, so you have to select scene presets via the menu. Even so, the camera was quick and easy to use. The lightning-fast performance helps and pictures were captured every 1.3 seconds and at 2fps in continuous mode.

Sony's face-detection system quickly detects and tracks up to eight faces, including profiles and heads that are tilted at an angle. This helped with focusing, but the benefits it gave to exposure weren't as dramatic. The camera decided the flash was necessary when shooting people in direct sunlight. This did get rid of heavy shadows, but we didn't find that it improved image quality.

Otherwise, image quality was decent, but below average compared to the other cameras here. The 1cm macro focus produced amazing close-ups, but in other shots, focus was a little soft and skin textures weren't that detailed. Low-light photography displayed little noise, though, with acceptable results at ISO 1600, and image stabilisation helped avoid blur with reasonable success.



SUMMARY

- ✓ Stylish, ultra-compact design
- ✗ Unremarkable image quality

COMPACT DIGITAL CAMERA
8 megapixels (3,264x2,448 pixels), 3x optical zoom, 31MB internal memory, Memory Stick Pro Duo, 3.6V 940mAh li-ion battery
PART CODE DSCT20S.CEH
SUPPLIER www.camerabox.co.uk
DETAILS www.sony.co.uk

RICOH Caplio R6

★★★★★

£157 inc VAT

The Caplio R6 has some unusual features, most of which are positive. The 7x zoom is the second largest here, and starts at a wide-angle 28mm focal length. However, the zoom lever leaps through the zoom range at breakneck speed, so it is hard to frame a composition accurately. Zooming and focusing is accompanied by loud, high-pitched whirring sounds, and focusing is slow in low light and telephoto zoom settings. The 1cm macro focus produced some extraordinary close-ups, although these suffered from chromatic aberrations, with misaligned red, green and blue parts of the image.

The R6's face-detection mode managed to identify faces reliably and wasn't fooled by a strong backlight; most of the other cameras failed on one or both of these counts. Its image stabilisation was less impressive, though, with less than half of our stabilisation test shots blur-free.

Fussy autofocus aside, performance is excellent. It captured a photo every 1.4 seconds, and every 0.8 seconds after switching to manual focus. The 2.6fps continuous mode is the fastest we have seen from a compact camera and beats some digital SLRs, too. Browsing and deleting files on the camera is fairly slow, though.

The 7.1-megapixel sensor is the joint lowest here, but the R6 didn't embarrass itself for detail, except for the odd time when the autofocus misfired. Outdoor colours were excellent, but indoors, photos tended to be a little pasty and noise was higher than with the others in the group. Sadly, this takes the shine off an otherwise excellent camera.



SUMMARY

- ✓ Large zoom; fast performance
- ✗ Poor indoor image quality

COMPACT DIGITAL CAMERA 7.1 megapixels (3,072x2,304 pixels), 7x optical zoom, 56MB internal memory, SDHC, 3.6V 1,000mAh li-ion battery
PART CODE HK-RR6JS
SUPPLIER www.cliftoncameras.co.uk
DETAILS www.ricoh.co.uk

SONY Cyber-shot DSC-W90

★★★★★

£165 inc VAT

The DSC-W90 looks more conventional than the T20 (above), but it's far from plain-looking. The 115,000-pixel resolution of its screen is disappointing, but it isn't a major drawback, and an optical viewfinder window is included.

Many of the strengths and weaknesses of the T20 apply here: fantastic performance, fast and accurate face recognition, an 8-megapixel sensor and 3x zoom lens with optical image stabilisation, which kept three quarters of our test shots sharp. A mode wheel provides quick access to various scene presets, including Hi ISO for shooting in low light without the flash. The lack of a manual white balance option is disappointing, but we had no call for it during testing.

The W90's images weren't the most detailed, but were a little better than the T20's. Colours were excellent with few exceptions, and flash photography was flattering to skin tones. The maximum ISO speed of 3200 makes a bold statement about the camera's noise performance. Although pictures at this setting were pretty hopeless, ISO 1600 shots were among the cleanest here and good enough for casual snaps.

Pentax's A30 takes superior images and costs less, but the W90's better battery life, stabilisation and face detection still make it a good choice.



SUMMARY

- ✓ Fast performance
- ✗ Low-resolution screen

COMPACT DIGITAL CAMERA
8 megapixels (3,264x2,448 pixels), 3x optical zoom, 31MB internal memory, Memory Stick Pro Duo, 3.6V 940mAh li-ion battery
PART CODE DSCW90S.CEH
SUPPLIER www.buyacameras.co.uk
DETAILS www.sony.co.uk

CANON Digital Ixus 950 IS

★★★★★

£179 inc VAT

Canon's flagship Ixus is one of the better-looking cameras here. The 4x zoom range is wider than most and its optical image stabilisation eliminated blur in most test shots. Performance is good at 1.8 seconds between shots, and startup and autofocus times are particularly quick. Battery life is disappointing, though.

Video capture is excellent, with smooth auto exposure, high-quality stereo sound and the ability to shoot time-lapse videos, capturing a frame every one or two seconds to play back 30 or 60 times faster. The Motion JPEG format produces larger files than MPEG4, but it gave sharper results.

The camera put in a dependable performance in our image-quality tests. Pictures were generally crisp and sharp, though skin textures weren't quite as detailed as with the best cameras here. Colours were pleasing and portraits taken in direct sunlight were impressive, arguably thanks to Canon's face detection. It was quick and reliable at finding faces to lock on to and its habit of using the flash to cope with strong backlights proved effective, but only when the flash was enabled. With the flash suppressed, it underexposed our subject. Noise was a little higher than average and meant that the ISO 800 and 1600 settings were best avoided, although this is a precaution the automatic settings took without prompting.

There's much to like in the 950 IS, but not quite enough to earn it five stars, and its price seems a tad high.



SUMMARY

- ✓ Fast performance
- ✗ Poor battery life

COMPACT DIGITAL CAMERA
8 megapixels (3,264x2,448 pixels), 4x optical zoom, 16MB SD memory, SDHC, 3.7V 1,120mAh li-ion battery
PART CODE 2048B005AA
SUPPLIER www.amazon.co.uk
DETAILS www.canon.co.uk

NIKON Coolpix P5000

★★★★★

£179 inc VAT



Most cameras here are aimed at casual users, but Nikon has kept photographers in mind with the Coolpix P5000.

There is a hotshoe for an external flash unit and a threaded lens ring for attaching wide-angle and telephoto adaptors. These lens adaptors are expensive, though, and the lens's 3.5x zoom range is disappointing.

A command dial makes it quick to adjust the shutter speed and aperture, and an additional button quickly switches the dial to ISO speed duties. However, the shutter speed control moves in whole stops (rather than thirds of a stop), which is too crude for fine adjustments. Face detection is included, but applies only to focus and not exposure. It's also disappointing to find no manual focus or RAW capture mode on a camera aimed at enthusiasts. Still, the optical image stabilisation is better than any other system we've seen, keeping all 20 of our 1/30s test shots sharp.

The Coolpix P5000's image quality doesn't disappoint, with faithful colours, sharp detail, expertly chosen automatic settings and remarkably low noise at ISO 800. The ISO control goes all the way up to 3200, although the resolution automatically drops to five megapixels and pictures still look blurred.

The biggest problem is the speed at which pictures are captured. Autofocus takes up to two seconds, and the camera managed a shot every 3.4 seconds on average. Continuous mode was the worst here at 0.4fps. Enthusiasts wouldn't put up with this, and neither should anyone else.

SUMMARY

- ✓ Sophisticated controls
- ✗ Slow performance

COMPACT DIGITAL CAMERA 10 megapixels (3,648x2,736 pixels), 3.5x optical zoom, 21MB internal memory, SDHC, 3.7V 1,100mAh li-ion battery
PART CODE VAA700B1
SUPPLIER www.onestop-digital.com
DETAILS www.europe-nikon.com

SAMSUNG NV11

★★★★★

£180 inc VAT



The NV11 is the successor to Samsung's NV10, which was reviewed in *Labs, Shopper* December 2006. We're delighted to see that the new model has a more powerful 5x zoom, a larger 2.7in screen and improved image quality rather than more megapixels, as is the case with most updated camera designs.

Samsung has ditched the usual five-way navigation pad in favour of 13 unmarked buttons that run along the bottom and right-hand side of the screen. These line up with onscreen icons, providing a quick way to adjust settings without delving into the menus. Priority and manual exposure modes are available, with good visual feedback to help choose settings. Face detection is included and, although its ability to spot faces was poor, it coped better than most at ignoring a strong backlight.

The NV11's performance is its biggest flaw. It took four-and-a-half seconds to switch on and capture a photo, and pressing the shutter button before the camera was ready caused it to take even longer. Autofocus was slow and often failed to lock on to nearby subjects, and there was a three-second gap between shots.

While the NV10 failed to live up to its 10-megapixel rating, the NV11 has no such problems, producing some of the most detailed shots here. It came top for colour accuracy, excelling at indoor shots both with and without the flash. But noise was fairly intrusive at ISO 400 and above, and the lack of image stabilisation means this isn't a camera for low-light photography.

SUMMARY

- ✓ Full photographic control
- ✗ Poor battery life; slow

COMPACT DIGITAL CAMERA 10 megapixels (3,648x2,736 pixels), 5x optical zoom, 20MB internal memory, SDHC, 3.7V 1,100mAh li-ion battery
PART CODE 8801089410511
SUPPLIER www.purelygadgets.co.uk
DETAILS www.samsungcamera.co.uk

CASIO Exilim Zoom EX-Z1200

★★★

£184 inc VAT



The EX-Z1200's headline specification is its 12-megapixel sensor. The benefit of such a massive resolution is questionable, but it makes sense if you like to print A3 enlargements or crop pictures to an area of interest on your PC. The downside is bigger files, slower performance and more image noise.

The EX-Z1200 has a 2.8in LCD screen and 848x480 widescreen video capture mode. Image stabilisation is built into the sensor, but it was fairly ineffective at reducing blur, only managing to keep 10 per cent of photos sharp when shooting at a 1/30s shutter speed at the full 3x zoom setting.

Face detection includes a Family First mode, which lets you store up to six faces of people who receive priority when shooting larger groups. On one or two occasions, we saw evidence of it working. More often, though, the camera struggled to separate faces from plants or furniture, let alone identify family members. More practical options are available, including priority and manual exposure modes, although the ISO speed mysteriously became fixed at 50 in shutter-priority and manual exposure modes.

The EX-Z1200 managed a pedestrian three seconds between photos and a 0.6fps continuous mode. Image noise spoiled indoor shots, even at modest ISO settings. Photos taken under bright light were stunningly detailed, but lacked contrast, and overall this camera came bottom in the group for image quality.

SUMMARY

- ✓ Detailed shots in bright light
- ✗ Noisy, disappointing photos

COMPACT DIGITAL CAMERA 12 megapixels (4,000x3,000 pixels), 3x optical zoom, 11MB internal memory, SDHC, 3.7V 1,300mAh li-ion battery
PART CODE EX-Z1200BKDD
SUPPLIER www.purelygadgets.co.uk
DETAILS www.casio.co.uk

PANASONIC Lumix DMC-TZ3

★★★★★

£205 inc VAT



The DMC-TZ3 is a beefed up version of Panasonic's DMC-TZ2 (reviewed in *What's New, Shopper* August 2007), upping the resolution to seven megapixels and the LCD screen to a whopping three inches.

Even more impressive is the lens. The zoom starts at a wide-angle 28mm and goes all the way to 280mm, giving a 10x zoom range that's rare among compact cameras. This feature allows you to frame subjects far more creatively than a smaller zoom permits. The lens also includes highly effective optical image stabilisation, important when shooting at extreme telephoto zoom settings. However, the f/3.3 maximum aperture captures less light than the other cameras' f/2.8 apertures.

Considering the camera's creative potential, it's disappointing that priority and manual exposure modes aren't available. Still, it's easy to use, and an Intelligent ISO mode lets you set the maximum ISO speed that the Auto ISO can use. The amount of noise and detail-killing noise-reduction processing that appear at ISO 800 and 1250 won't be to everyone's taste, but a steady hand is needed to shoot indoors at ISO 400 without the flash.

Noise was below average in this group, and images weren't significantly less detailed than from the higher-resolution cameras. Colour reproduction was superb, with vibrant tones and expertly judged exposures. Performance was excellent, with 1.4 seconds between shots and a 1.9fps continuous mode. It's the priciest camera here, but the stabilised 10x zoom lens is well worth paying for.

SUMMARY

- ✓ Huge zoom; fast performance
- ✗ Average battery life

COMPACT DIGITAL CAMERA 7.1 megapixels (3,072x2,304 pixels), 10x optical zoom, 13MB internal memory, SDHC, 3.7V 1,000mAh li-ion battery
PART CODE DMC-TZ3EB-S
SUPPLIER www.camerabox.co.uk
DETAILS www.panasonic.co.uk

COMPACT DIGITAL CAMERAS



MANUFACTURER	CANON	CASIO	FUJIFILM	NIKON	OLYMPUS	PANASONIC
Model	Digital Ixus 950 IS	Exlim Zoom EX-Z1200	FinePix F40fd	Coolpix P5000	µ820	Lumix DMC-TZ3
Rating	★★★★	★★★	★★★★	★★★★	★★★★	★★★★★
Effective number of pixels	8 megapixels	12 megapixels	8.1 megapixels	10 megapixels	8 megapixels	7.1 megapixels
Viewfinder	Optical	None	None	Optical	None	None
LCD screen	2½in (230,000 pixels)	2.8in (230,400 pixels)	2½in (230,000 pixels)	2½in (230,000 pixels)	2.7in (230,000 pixels)	3in (230,000 pixels)
Optical zoom (35mm-equiv)	4x (35-140mm)	3x (37-111mm)	3x (36-108mm)	3.5x (36-126mm)	5x (36-180mm)	10x (28-280mm)
Image stabilisation	Optical, lens based	Optical, CCD-shift	None	Optical, lens based	None	Optical, lens based
Maximum image resolution	3,264x2,448	4,000x3,000	3,296x2,472	3,648x2,736	3,264x2,488	3,072x2,304
Maximum movie quality	640x480 at 30fps	848x480 at 20fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps
File formats (still; movie)	JPEG; AVI (M-JPEG)	JPEG; MOV (MPEG4)	JPEG; AVI (M-JPEG)	JPEG; AVI (M-JPEG)	JPEG; AVI (M-JPEG)	JPEG; QuickTime (M-JPEG)
CAMERA CONTROLS						
Exposure modes	Program	Program, shutter priority, aperture priority, manual	Program	Program, shutter priority, aperture priority, manual	Program	Program
Shutter speed	Auto	30 to 1/1000 seconds	Auto	8 to 1/2000 seconds	Auto	Auto
Aperture range	Auto	f/2.8 to f/8	Auto	f/2.7 to f/7.6	Auto	Auto
ISO range (at full resolution)	80 to 1600	50 to 400 (1600 in scene presets)	100 to 1600	64 to 1600	50 to 1600	100 to 1250
Exposure compensation	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV
White balance	Auto, five presets, manual	Auto, six presets, manual	Auto, six presets, manual	Auto, five presets, manual	Auto, six presets	Auto, four presets, manual
Additional image controls	10 colour presets	None	None	Six colour presets	None	Six colour presets
Manual focus	No	Yes	No	Infinity only	No	No
Closest macro focus	2cm	6cm	7cm	4cm	3cm	5cm
Autofocus modes	Multi, centre, face detect	Multi, centre, tracking, face detect	Multi, centre, face detect	Multi, centre, spot, face detect	Multi, centre, face detect	9-point, 3-point, 1-point
Flash modes	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction
Drive modes	Single, continuous, self-timer	Single, continuous, self-timer	Single, continuous, self-timer	Single, continuous, self-timer, exposure bracket, interval	Single, continuous (3-megapixel only), self-timer	Single, continuous, self-timer
PHYSICAL						
Memory type (supplied)	SDHC (16MB SD)	SDHC (11MB internal)	SD and xD (25MB internal)	SDHC (21MB internal)	xD slot (47MB internal)	SDHC (13MB internal)
Power	3.7V 1,120mAh li-ion	3.7V 1,300mAh li-ion	3.6V 1,150mAh li-ion	3.7V 1,100mAh li-ion	3.7V 1,000mAh li-ion	3.7V 1,000mAh li-ion
Battery life (tested)	288 shots	383 shots	415 shots	358 shots	229 shots	289 shots
Connectivity	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV, infrared	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV
Accessories	USB and AV cables	USB and AV cables	USB and AV cables	USB and AV cables	USB and AV cables	USB and AV cables
Weight (with card/battery)	165g	152g	155g	200g	125g	232g
Dimensions (HxWxD)	57x91x27mm	59x94x23mm	59x96x24mm	65x98x41mm	57x96x24mm	59x105x37mm
BUYING INFORMATION						
Price including VAT	£179	£184	£129	£179	£151	£205
Supplier	www.amazon.co.uk	www.purelygadgets.co.uk	www.purelygadgets.co.uk	www.onestop-digital.com	www.amazon.co.uk	www.camerabox.co.uk
Details	www.canon.co.uk	www.casio.co.uk	www.fujifilm.co.uk	www.europe-nikon.com	www.olympus.co.uk	www.panasonic.co.uk
Part code	2048B005AA	EX-Z1200BKDD	N079010A	VAA700B1	N3093792	DMC-TZ3EB-S



MANUFACTURER	PENTAX	PENTAX	RICOH	SAMSUNG	SONY	SONY
Model	Optio A30	Optio W30	Caplio R6	NV11	Cyber-shot DSC-T20	Cyber-shot DSC-W90
Rating	★★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Effective number of pixels	10 megapixels	7.1 megapixels	7.1 megapixels	10 megapixels	8 megapixels	8 megapixels
Viewfinder	None	None	None	None	None	None
LCD screen	2½in (232,000 pixels)	2½in (115,000 pixels)	2.7in (230,000 pixels)	2.7in (230,000 pixels)	2½in (230,000 pixels)	2½in (115,000 pixels)
Optical zoom (35mm-equiv)	3x (38mm-114mm)	3x (38-114mm)	7x (28-200mm)	5x (38-190mm)	3x (38-114mm)	3x (35-105mm)
Image stabilisation	Optical, CCD-shift	None	Optical, CCD-shift	None	Optical, lens based	Optical, lens based
Maximum image resolution	3,648x2,736	3,072x2,304	3,072x2,304	3,648x2,736	3,264x2,448	3,264x2,448
Maximum movie quality	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps
File formats (still; movie)	JPEG; AVI (M-JPEG)	JPEG; MOV (M-JPEG)	JPEG; AVI (M-JPEG)	JPEG; AVI (MPEG4)	JPEG; MPEG1	JPEG; MPEG1
CAMERA CONTROLS						
Exposure modes	Program, shutter priority, manual	Program	Program	Program, shutter priority, aperture priority, manual	Program	Program
Shutter speed	4 to 1/1000 seconds	Auto	Auto, 1 to 8 seconds	15 to 1/1000 seconds	Auto	Auto
Aperture range	f/2.8 to f/8	Auto	Auto	f/2.8 to f/7.3	Auto	Auto
ISO range (at full resolution)	64 to 1600	64 to 3200	64 to 1600	80 to 1600	80 to 3200	80 to 3200
Exposure compensation	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV
White balance	Auto, four presets, manual	Auto, four presets, manual	Auto, five presets, manual	Auto, five presets, manual	Auto, five presets	Auto, seven presets
Additional image controls	Contrast, saturation, sharpness	None	Contrast, sharpness	Five colour presets	Four colour presets	Four colour presets
Manual focus	Yes	Yes	Yes	Yes	Five presets	Five presets
Closest macro focus	6cm	1cm	1cm	1cm	1cm	4cm
Autofocus modes	Multi, centre, pan, face detect	Multi, centre, pan, face detect	Multi, centre, face detect	Multi, face detect	Multi, centre-weighted, centre, face detect	Multi, centre-weighted, centre, face detect
Flash modes	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction
Drive modes	Single, continuous, self-timer	Single, continuous, self-timer, interval	Single, continuous, self-timer, exposure bracket, white balance bracket, interval	Single, continuous, self-timer, exposure bracket	Single, continuous, self-timer, exposure bracket	Single, continuous, self-timer, exposure bracket
PHYSICAL						
Memory type (supplied)	SDHC (22MB internal)	SDHC (22MB internal)	SDHC (56MB internal)	SDHC (20MB internal)	Memory Stick Pro Duo (31MB internal)	Memory Stick Pro Duo (31MB internal)
Power	3.7V 710mAh li-ion	3.7V 740mAh li-ion	3.6V 1,000mAh li-ion	3.7V 1,100mAh li-ion	3.6V 940mAh li-ion	3.6V 940mAh li-ion
Battery life (tested)	283 shots	294 shots	442 shots	289 shots	364 shots	438 shots
Connectivity	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV
Accessories	USB and AV cables	USB and AV cables	USB and AV cables	USB and AV cables	Combined USB/AV cable	Combined USB/AV cable
Weight (with card/battery)	130g	140g	135g	195g	127g	124g
Dimensions (HxWxD)	58x90x24mm	54x108x24mm	55x100x25mm	64x107x39mm	56x90x23mm	58x91x23mm
BUYING INFORMATION						
Price including VAT	£133	£144	£157	£180	£155	£165
Supplier	www.ebuyer.com	www.purelygadgets.co.uk	www.cliftoncameras.co.uk	www.purelygadgets.co.uk	www.camerabox.co.uk	www.buyacamera.co.uk
Details	www.pentax.co.uk	www.pentax.co.uk	www.ricoh.co.uk	www.samsungcamera.co.uk	www.sony.co.uk	www.sony.co.uk
Part code	19215	19275	HK-RR6JS	8801089410511	DSC1205.CEH	DSCW905.CEH

Labs verdict Digital cameras

With a budget of £130 to £200, it's not hard to find some impressive cameras. Olympus's µ820 and Samsung's NV11 came close to getting awards. Both have a 5x zoom and produce superb images, but slow performance and a lack of image stabilisation let them down. Ricoh's Caplio R6 is frighteningly fast and has a great 7x zoom lens, but its image quality was behind others here.

The two cameras to receive five-star ratings could not be more different. Panasonic's Lumix

DMC-TZ3 is the bulkiest and most expensive camera here, but its 10x zoom lens gives great flexibility. With great performance and no significant flaws, it's a Best Buy.

Pentax's Optio A30 doesn't have any remarkable features on paper, but it produced some of the best photos we've ever seen from a compact camera and did it quickly, too. With comprehensive manual controls and an extremely competitive price, it's our second Best Buy. **CB**



PANASONIC
Lumix
DMC-TZ3
★★★★★



PENTAX
Optio A30
★★★★★

